



## Features

- 180~295VAC input only
- Built-in active PFC
- Output current level selectable by DIP switch
- Built-in DALI interface and push dimming function (DA version)
- Built-in 0~10Vdc and PWM signal dimming function (Non-DA version)
- Power supply synchronization function up to 10 units
- Temperature compensation function by external NTC
- Class II power unit, ungrounded
- Built-in 12V/50mA auxiliary output
- Full plastic case enclosed
- No load power consumption <1W (1.2W for DA version)
- Protections: Short circuit / Over voltage / Over temperature
- 3 year warranty
- Suitable for intelligent LED lighting

## Wiring

- Housing with cable clamp for remote installation
- Use wires with an adequate cross-section (see 5)
- Use suitable mounting tools to do the wiring and mounting (see 5)
- Use a MCB (miniature circuit breaker) with an adequate current rating to protect the lighting system (see 6)

## Environmental limitations

- Maximum ambient temperature must not exceed 60°C
- Always allow adequate ventilation clearances, 50mm, around the unit in use to prevent it from overheating
- Only install the unit in interior environments

## Cautions

- This unit must be installed by a qualified electrician
- This unit is not suitable for applications that DC/DC converters are connected before LED lamps

## Settings and connections

### 1. Output Current Level Settings

The LCM can provide various output currents by setting the DIP switch. The settings of the DIP switch are shown in the tables below.

LCM-40(DA)

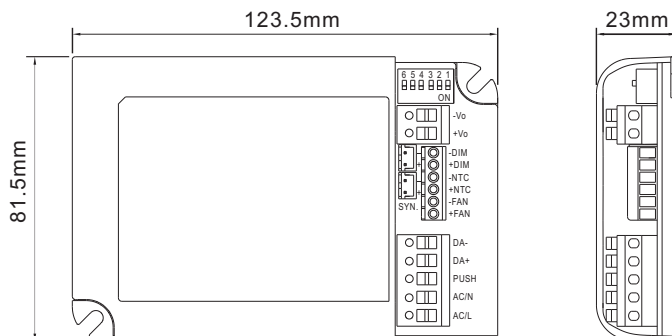
Voltage range	Selectable Current	1	2	3	4	5	6
2-100V	350mA	---	---	---	---	---	---
2-80V	500mA	ON	---	---	---	---	---
2-67V	600mA	ON	ON	---	---	---	---
2-57V	700mA*	ON	ON	ON	---	---	ON
2-45V	900mA	ON	ON	ON	ON	---	ON
2-40V	1050mA	ON	ON	ON	ON	ON	ON

LCM-60(DA)

Voltage range	Selectable Current	1	2	3	4	5	6
2-90V	500mA	---	---	---	---	---	---
2-90V	600mA	ON	---	---	---	---	---
2-86V	700mA*	ON	ON	---	---	---	---
2-67V	900mA	ON	ON	ON	---	---	ON
2-57V	1050mA	ON	ON	ON	ON	---	ON
2-42V	1400mA	ON	ON	ON	ON	ON	ON

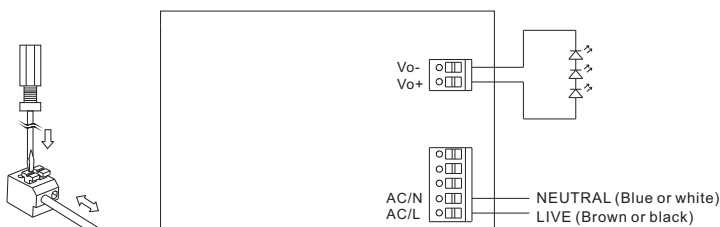
- Note : 1. Factory default setting is 700mA.  
2. Output voltage and output wattage must not exceed the rated values.

### Terminal blocks assignment for LCM



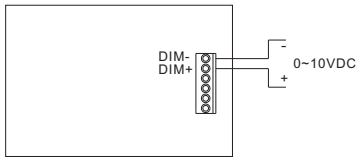
### 2. Connection of LED Lamps

Press down the "push button" by a slotted screw driver to insert or remove the cable.

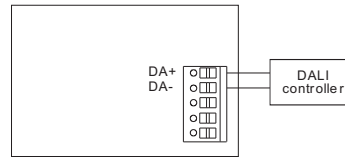


### 3. Connection of Dimming Functions

#### a. 0-10Vdc or 10V PWM (non-DA version only)

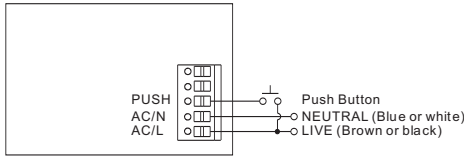


#### b. DALI (DA version only)



Note : Maximum DALI cable length is 300m (based on a 1.5mm<sup>2</sup> or 14AWG cable)

#### c. Push dim (DA version only)



Note: ONLY use open push button without indicator light.

**Warning:** Risk of short circuit. The push button can only be linked between the PUSH and the AC/L (brown or black). DO NOT connect the push button to the AC/N (blue or white).

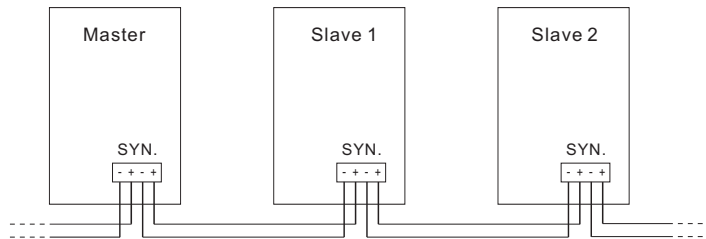
#### Dimming control mechanism

Function	Pushing time
Turn ON/OFF	0.1 ~ 1 sec
Dim UP/DOWN	1.5 ~ 10 sec
Reset	> 11 sec
None	< 0.05 sec

- It will always dim up when light intensity is lower than 10%, whereas it will always dim down when light intensity is higher than 90%
- Factory dimming setting: 100%

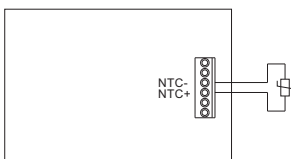
#### d. Synchronization operation

The lights driven by LCM units (slaves) can be dimmed synchronously through a LCM (the master) directly controlled via 0-10Vdc, 10V PWM, DALI or push dim dimming function. The wiring is shown as below.



- Mating housing for SYN. connectors : JST B2B-XH or equivalent
  - Maximum number of the LCM units : 10 (1 master + 9 slaves)
  - Maximum cable length between each units : 20m (based on a cable with cross-section of 0.15mm<sup>2</sup>~0.3mm<sup>2</sup> or AWG No. of 22 ~ 26)
- Note: DO NOT connect dimming circuitry to slaves.

### 4. NTC Connection



### 5. Recommended Screwdriver, Wire and Torque Setting

Type	The cover (the blue one)	Screw terminal (FAN $\pm$ , NTC $\pm$ , DIM $\pm$ )	Push terminal (ACL/N, PUSH, DA $\pm$ , Vo $\pm$ )
Solid wire	-----	$\phi$ 0.404 - $\phi$ 0.643mm	$\phi$ 1.024 - $\phi$ 1.628mm
Stranded wire	-----	0.129 - 0.326mm <sup>2</sup>	0.823 - 2.08mm <sup>2</sup>
American wire gauge	-----	22 - 26AWG	14 - 18AWG
Wire stripping length	-----	7mm (0.27")	10mm (0.39")
Screwdriver	6mm Philips	3mm Philips	3mm Philips
Recommended tightening torque	4.6 kgf-cm (4 lb-in)	2.88 kgf-cm (2.5 lb-in)	-----
Suggested push-down strength	-----	-----	3 - 4 kp (1.36-1.81 lbf)

### 6. Suggested Maximum Number of the LCM Units that can be Connected to a MCB (miniature circuit breaker) at 230Vac

Model	B10	B16	C10	C16
LCM-40(DA)	10	16	17	28
LCM-60(DA)	9	15	16	26

Note: These calculated values are based on MCB S201 series manufactured by ABB.